

Weekly Influenza Summary:

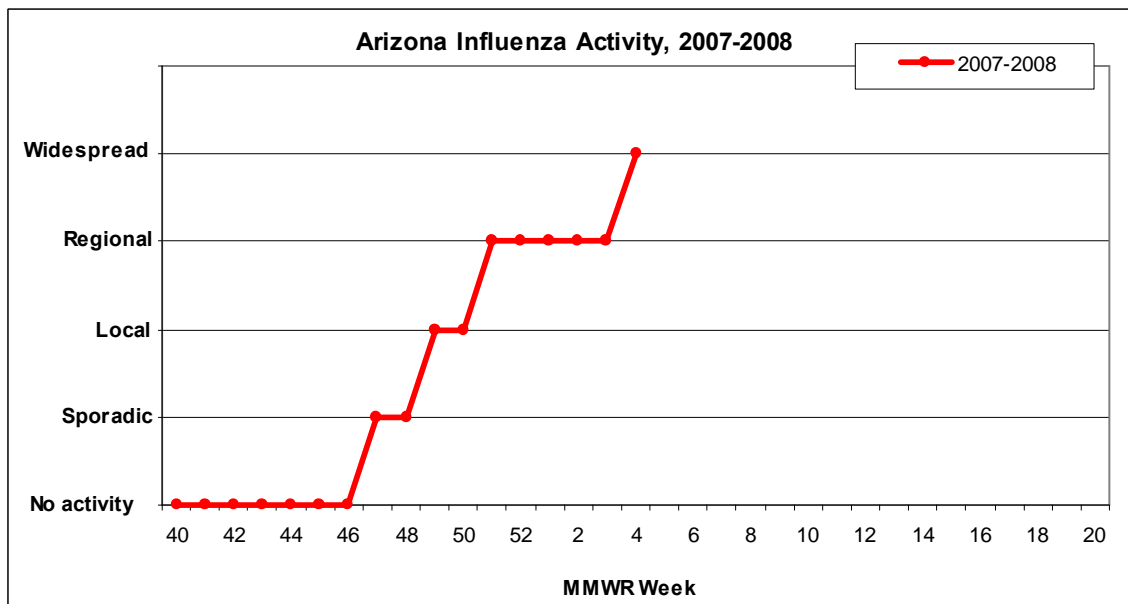
Arizona's influenza activity level increased to "Widespread" activity for the week ending in 2/02/08 (week 5). During the 2007-2008 influenza season, 949 lab-confirmed cases have been reported from thirteen out of fifteen counties and 5 cases were reported from an unknown county source. No pediatric influenza-associated deaths have been reported in Arizona for the current season. The influenza-like-illness rate is above the state baseline for week 4.

Data in this report are provisional and may change as more reports are received.

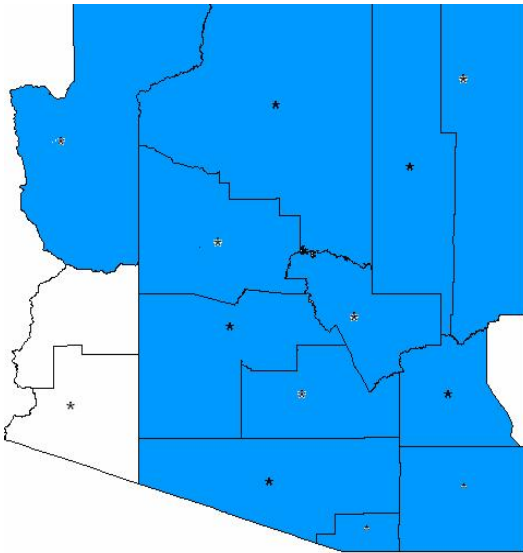
National influenza surveillance data are available at the CDC's Influenza Surveillance site (<http://www.cdc.gov/flu/weekly/fluactivity.htm>).

Arizona Influenza Activity Levels

The graph below shows the influenza activity levels reported to the CDC for this season only. CDC has changed the reporting criteria for state activity levels so Arizona's data from previous seasons are no longer directly comparable to the current season. For week 5, Arizona reported "widespread activity". Definitions of these reporting categories can be found at <http://www.cdc.gov/flu/weekly/fluactivity.htm>.



Influenza Activity by County:



Key:

* = Any activity reported this season

Blue = Activity reported in past three weeks

White = No activity reported in past three weeks

Flu Cases Reported 2007 – 2008 Season

County	# cases	County	# cases	County	# cases
Apache	9	Greenlee	0	Pima	63
Cochise	5	La Paz	0	Pinal	13
Coconino	213	Maricopa	488	Santa Cruz	3
Gila	2	Mohave	13	Yavapai	4
Graham	81	Navajo	54	Yuma	1
Unknown	5			Total	954

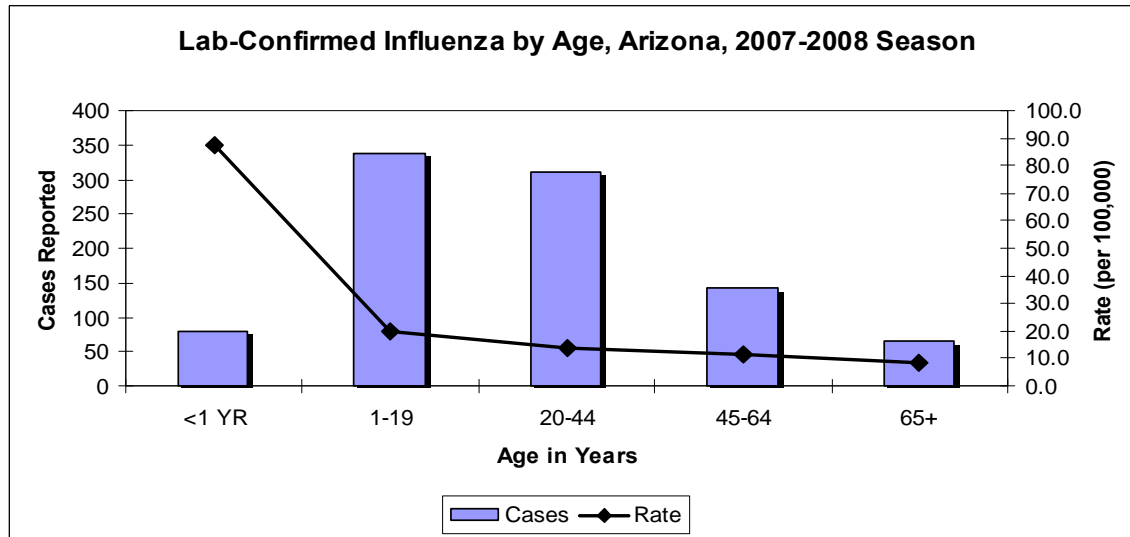
Flu Cases Reported Last Week

County	# cases	County	# cases	County	# cases
Apache	3	Greenlee	0	Pima	16
Cochise	5	La Paz	0	Pinal	8
Coconino	117	Maricopa	116	Santa Cruz	2
Gila	1	Mohave	9	Yavapai	2
Graham	76	Navajo	21	Yuma	0
Unknown	0			Total	376

Lab Surveillance:

Laboratories report positive influenza tests to ADHS. Of the lab-confirmed influenza reported this season, 629 are influenza A (169 confirmed by culture or PCR), 222 are influenza B (43 confirmed by culture or PCR) and 103 are unknown.

Ages of reported cases range from less than one year to over 65 years.



Subtyping – Culture or PCR Results:

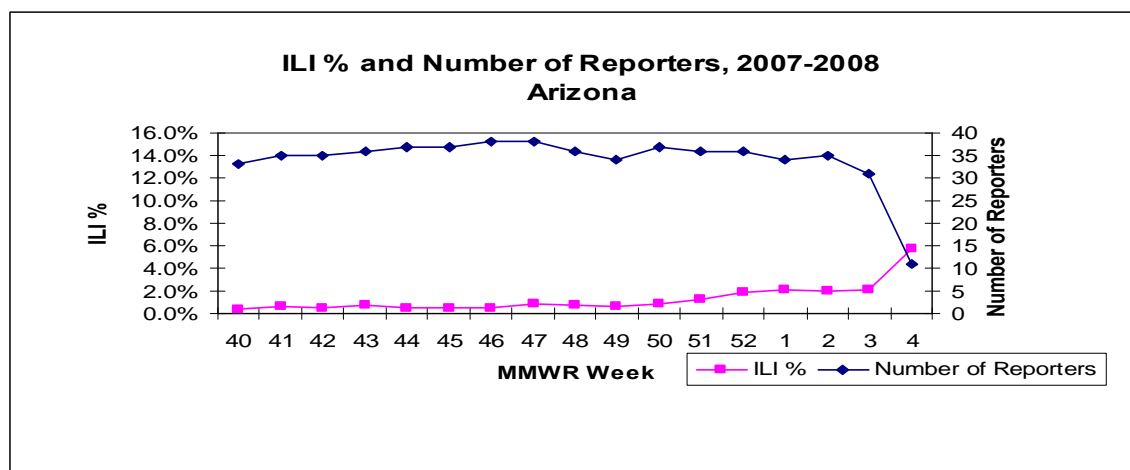
Viral isolation, or culture, is currently the gold standard for diagnosis of influenza virus infections. The influenza subtype can be determined by a test called hemagglutination inhibition (HI) using viral isolates. Polymerase chain reaction (PCR) can also be used to identify influenza B and the hemagglutinin (H) component of influenza A.

Of the 169 culture- or PCR-confirmed influenza A cases, 2 are H3N2 and 23 are H3 by PCR, 60 are H1 and 19 are H1N1 and the other 65 influenza A cases are untyped. The 43 PCR positive influenza B cases are untyped.

Influenza-Like Illness (ILI) Surveillance from Sentinel Providers

The proportion of patient visits to sentinel providers for ILI in the state was 5.8% for the week ending 1/26/2008 (week 4). This proportion is much higher than the Arizona ILI baseline (0.5%). As of 02/04/08, 11 sentinel providers reported by the end of week 3.

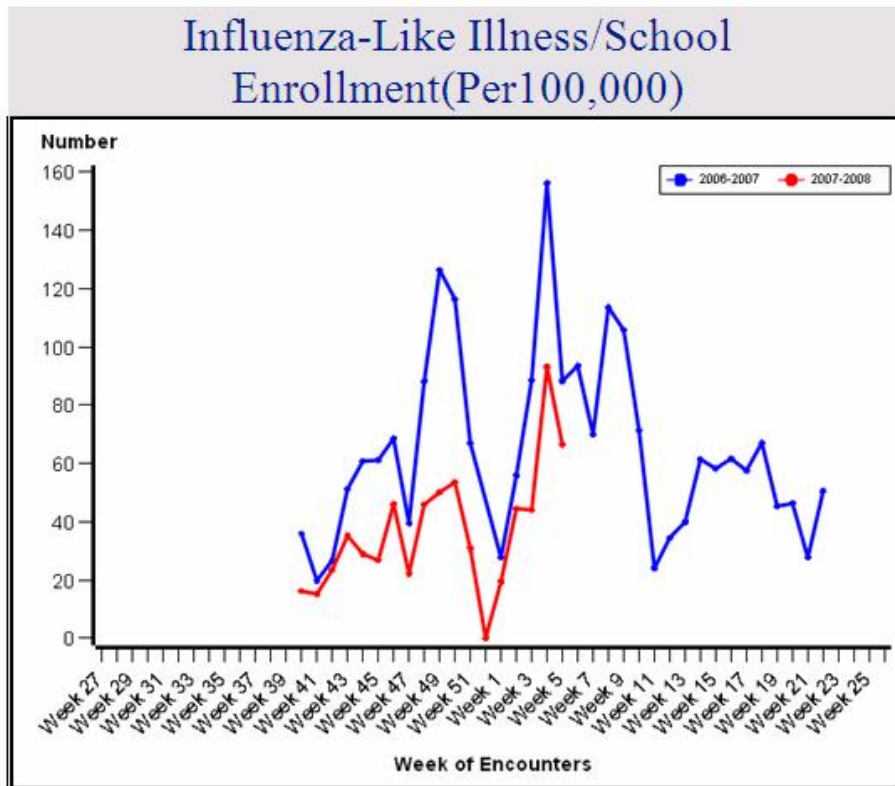
ILI is defined as a fever of at least 100°F plus either a cough or a sore throat.



Influenza-Like Illness (ILI) Surveillance from Participating Arizona Schools

The Arizona Department of Health Services (ADHS) and Arizona School Nurse Consortium (AZSNC) developed and implemented a software program called Child Health Indicator Program (CHIP) to assist school nurses in electronic management of student health records. Currently, the nurses of 340 Arizona schools use the software to collect information on student health conditions for 266 nursing diagnosis codes, including influenza-like illness (ILI), rash, and gastrointestinal illness (GI).

The graph presents the weekly trend of ILI syndromes reported among students during the school year of 2006-2007 and 2007-2008. The number of school nurse encounters are not diagnosed cases of communicable diseases but are based on the nursing codes (acute, chronic etc.) that school nurses entered to track student conditions. Also, the numbers in the graph are only from schools that used CHIP during the school year.

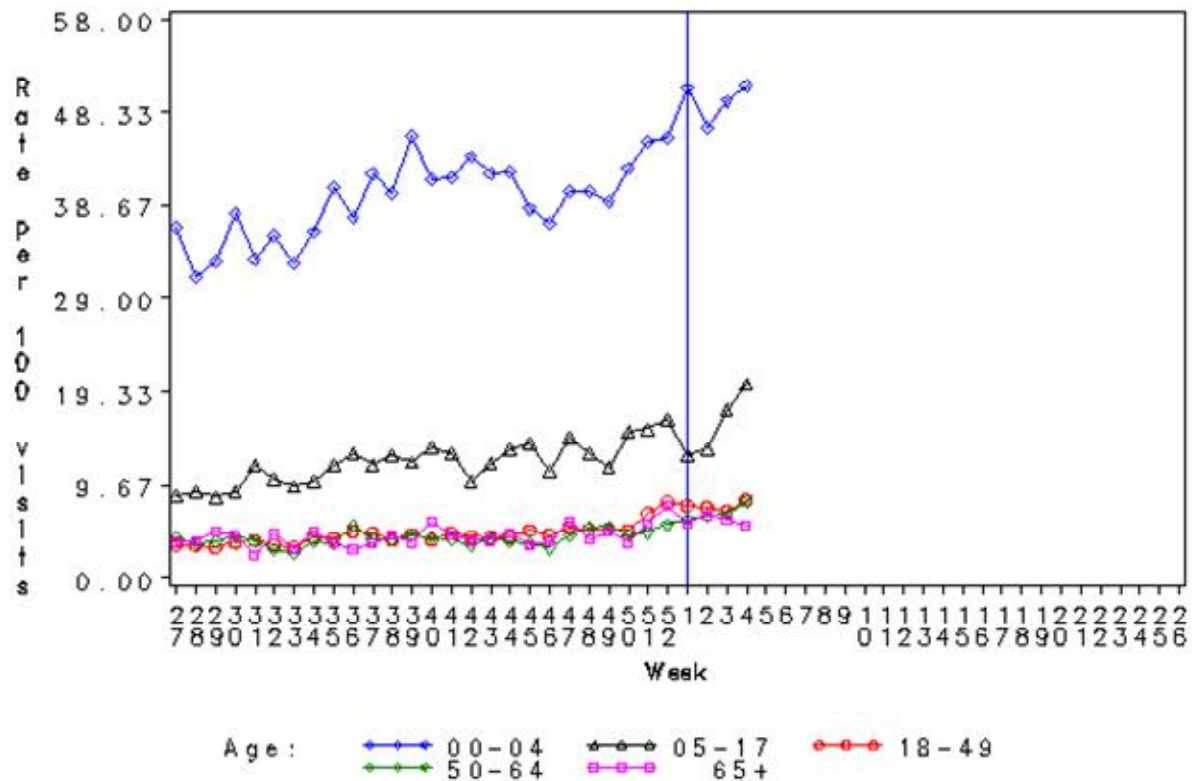


Influenza-Like Illness (ILI) Surveillance from Biosense

BioSense is to a national, real-time biosurveillance system that can be used for early event detection and health situational awareness. Currently, eight hospitals in Arizona submit data including patient chief complaint, physician diagnosis, supporting patient demographic data, daily hospital census to the CDC BioSense on daily basis. Please find more information about BioSense at <http://www.cdc.gov/biosense/>

The graphs are time series analysis results based on BioSense hospitals emergency department chief complaint data in Arizona. The trend lines overlaid in the graph are the rate of Flu-Fever-Cough cases per 100 visits by age group.

**BioSense Hospitals Emergency Department Chief Complaint Data, Flu-Fever-Cough
Arizona
Season 2007-2008**



Over the Counter Pharmaceutical Surveillance Data

Real-time Outbreak and Disease Surveillance (RODS) laboratory has collected surveillance data that track sales of over-the-counter (OTC) health care products such as cough syrup, anti-fever medication that are purchased early in the course of illness by sick individuals for the symptomatic treatment of illness. Currently, the National Retail Data Monitor (NRDM) collects over-the-counter (OTC) medication sales data from 264 stores in Arizona. Each retailer sends RODS the number of sales for each OTC medication. The medications are grouped into one of 18 OTC categories such as antidiarrheal, antifever pediatric, cold relief adult liquid, and throat Lozenges

As of 2/4/2008 2PM, 92.0% (243/264) Stores Reported for Sales Date 2/3/2008, the increased number of OTC sales increased above the threshold (2.0) were observed for the following items:

- Both unpromoted and all sales of Cold Relief Adult Liquid
- Both unpromoted and all sales of Cold Relief Adult Tablet
- All sales of Cough/Cold

RSV Activity in Arizona:

Increasing respiratory syncytial virus (RSV) activity has been reported in Arizona. As of 2/02/2008, 1,011 lab-confirmed cases have been reported. Among the totaled cases, 224 new cases of RSV were reported during week 5.

